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| APPLICATION NO.                                   | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|---|-----------------|----------------------|-------------------------|------------------|--|
| 10/057,288  | 01/25/2002      | Christian P. Larsen  | D0136NP/30436.58USU1    | 1849             |  |
| 23914   | 7590 10/06/2004 |                      | EXAM                    | EXAMINER         |  |
| STEPHEN B. DAVIS                                  |                 |                      | GAMBEL, PHILLIP         |                  |  |
| BRISTOL-MYERS SQUIBB COMPANY<br>PATENT DEPARTMENT |                 |                      | ART UNIT                | PAPER NUMBER     |  |
| P O BOX 4000                                      |                 |                      | 1644                    |                  |  |
| PRINCETON, NJ 08543-4000                          |                 |                      | DATE MAILED: 10/06/2004 |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.      | Applicant(s)  |  |  |  |
|--|----------------------|---------------|--|--|--|
|  | 10/057,288           | LARSEN ET AL. |  |  |  |
| Office Action Summary  | Examiner             | Art Unit      |  |  |  |
|  | Phillip Gambel       | 1644          |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |                      |               |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |                      |               |  |  |  |
| Status   |                      |               |  |  |  |
| 1) Responsive to communication(s) filed on   |                      |               |  |  |  |
|  | action is non-final. |               |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.   |                      |               |  |  |  |
| Disposition of Claims  |                      |               |  |  |  |
| Claim(s) / Y is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.  6) Claim(s) is/are rejected.  7) Claim(s) is/are objected to.  8 Claim(s) / Y are subject to restriction and/or election requirement.  |                      |               |  |  |  |
| Application Papers   |                      |               |  |  |  |
| 9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |                      |               |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |                      |               |  |  |  |
| Priority under 35 U.S.C. § 119   |                      |               |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>  |                      |               |  |  |  |
|  |                      |               |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)   |                      |               |  |  |  |
| <ol> <li>Notice of References Cited (PTO-592)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ol>   | Paper No(s)/Mail Da  |               |  |  |  |

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## **DETAILED ACTION**

- 1. This application appears to be in compliance with the Sequence Rules.
- 2. Claims 1 43 are pending.
- 4. This application contains claims directed to the following patentably distinct species of the claimed Invention: wherein the aklyating agent is selected from group set forth on page 26, paragraph 1 of the instant specification.

These species are distinct because their structures and physicochemical properties differ. Therefore, they are patentably distinct species

Alternatively, applicant is invited to acknowledge that these aklyating agents are obvious in view of one another.

Applicant is required under 35 U.S.C. § 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 1 is generic, for example.

4. In addition to the election of a species of an aklyating agent, this application contains claims directed to the following patentably distinct species of the claimed Invention: wherein the immunosuppressive composition (see pages 16, 17, 24 comprises:

a first ligand that interferes with binding of CD28 to either CD80 or C86 selected from the following:

- (A) CTLA4,
- (B) CD28.
- (C) B7-1.
- (D) B7-2,
- (E) B7-3,
- (F) anti-B7-1 antibody,
- (G) anti-B7-2 antibody,
- (H) anti-B7-3 antibody,
- (I) anti-CTLA4 antibody, or
- (J) anti-CD28 antibody.

and a second ligand that interferes with binding of CD40 to either CD154 selected from the following

- (A) anti-CD154 antibody or
- (B) CD40

These species are distinct because their structures and physicochemical properties differ. Therefore, they are patentably distinct species

Applicant is required to elect a species of a first ligand and a species of a second ligand.

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Applicant is required under 35 U.S.C. § 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 1 is generic, for example.

- 5. <u>In addition to the election of a species of an aklyating agent and of a species of an immunosuppressive composition</u>, this application contains claims directed to the following patentably distinct species of the claimed Invention: wherein the condition targeted is:
  - (A) inhibiting rejection of a solid organ transplant,
  - (B) beta-thalassemia or
  - (C) sickle cell anemia.

These species are distinct because their etiologies, pathologies and therapeutic endpoints differ.

Applicant is required under 35 U.S.C. § 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

6. Applicant is advised that a response to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. § 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. M.P.E.P. § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. § 103 of the other invention.

- 7. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.
- 8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

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supervisor, Christina Chan can be reached on (571) 272-0841.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip Gambel whose telephone number is (571) 272-0844. The examiner can normally be reached Monday through Thursday from 7:30 am to 6:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

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The fax number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phillip Gambel, PhD.

**Primary Examiner** 

Technology Center 1600

September 30, 2004